

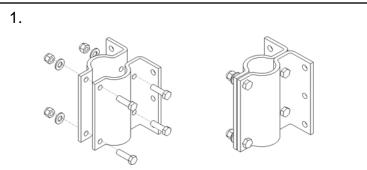
# Tent Trailer ProFormance Bike Rack Installation Instructions

## **Package Contents:**

- (1) 80" Load Bar
- (2) End Caps
- (2) Tube Adaptors
- (4) Frame Adaptors
- (2) Lower Uprights (larger diameter)
- (2) Upper Uprights (smaller diameter)
- (2) Lifting Eye Nuts
- (2 or 4) Tire Guards
- (1) Hex Key
- (2) T-bolts (1")
- (4) T-Bolts (1-3/4")
- (4) Nylon Washers
- (6) 1/4-20 Lock Nuts
- (8) 1/4 Flat Washers
- (2) 3/8 X 1-3/4 Lynch Pins
- (2) 1/4-20 X 2 1/2 Bolts
- (2) 1/4-20 X 9/16 Narrow Hex Shoulder Screws
- (4) 3/8-16 Square U-Bolts
- (2) 3/8-16 x2 1/2 Bolts
- (16) 3/8 Flat Washers
- (16) 3/8-16 Lock Nuts
- (8) 3/8-16 X 1 1/4 Bolts
- (1 or 2) Skewer Kit(s)

#### 1 Skewer Kit Includes:

- (2) Bike Skewer Holders
- (2) 9mm Skewer Rods
- (2) Skewer Backing Plates
- (4) 1/4-20 X 3/4 Button Cap Screws
- (4) 1/4 Split Washers
- (4) Nylon Straps



Place two frame adaptors on a flat surface and <u>loosely</u> bolt together with four  $3/8-16 \times 1-1/4$ " bolts, 3/8 washers, and 3/8 lock nuts as shown. Repeat for  $2^{nd}$  set.

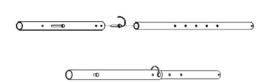


2.



Insert the lower upright tube (larger diameter) into the loosely assembled frame adaptor as shown and tighten the two the bolts nearest the 90° bend. Remove the lower tube and set aside. Repeat for the other frame adaptor.

3.



Slide the upper tube (smaller diameter) into the lower tube (larger diameter) as shown above. Position the upper tube so that the middle hole is in line with the top hole of the lower tube. Place the lynch pin through both tubes and secure the loop. Place the 3/8-16 X 2-1/2" bolt through the hole as shown. Repeat for the other tube assembly. Set tubes aside.

4.





Assemble the skewer as shown using 1/4-20 X 3/4 button cap screws and split washers. Repeat until all bike skewers are assembled and set aside.





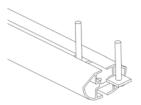
Screw the 1/4-20 X 9/16 narrow hex shoulder screw into the end cap using the hex key as shown. Repeat for other end cap. Set aside.

## 10.



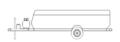
Position the assembled end cap as shown. Hold the end cap with one hand against the load bar and tighten with the narrow shoulder hex bolt with the hex key with the other hand. Repeat for other side and set aside.

6.



With the flat side of the load bar facing up, slide four 1-3/4" T-bolts into the load bar as shown.

11.



With a level, adjust trailer until frame is level front to back.

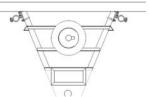
7.



Place the tube adaptor over the 1-3/4" t-bolts. Place the 1/4 flat washers and loosely tighten 1/4-20 lock nuts onto the 1-3/4" T-bolts. Repeat for the other tube adaptor.

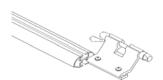
12.

## TOP VIEW



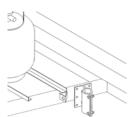
Using a assembled frame adaptor, examine the trailer to locate a suitable area to mount the frame adaptors that clears any interference from cross members, wiring harness clips, etc. Mount the frame adaptor as far rearward as possible, preferably on the outside of the frame. Check the opposite side of the trailer for clearance.

8.



Turn the load bar over and slide on the desired amount of bike skewers. If spacing bikes close together, alternate skewers front to back to stagger the bike handle bars. Tighten the skewers to the load bar using the supplied hex key.

13.



Assemble the frame adaptor to the trailer frame with the supplied U-bolts and hardware as shown below. Allow the U-bolts to rest on the trailer frame and tighten until the frame adaptors are secured to the frame of the trailer but able to be moved.

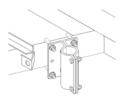
9.





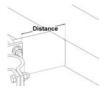
Slide the nylon washer over the 1" T-bolt. Slide the 1" T-bolt into the slotted guide and place another nylon washer on top. Tighten the eye nut onto the 1" T-bolt and tighten to the load bar at one end of the load bar. Repeat for the other end of load bar.

14.



With a level, position the frame adaptor until level with the trailer frame. Tighten U-bolts and recheck for level. Readjust if necessary.

## 15.



Measure the distance of that frame adaptor back to the frame support running perpendicular to the trailer. Record the distance.

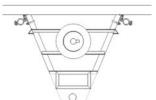
## 16.

Place the other frame adaptor on the opposite side of the trailer and loosely secure with U-bolts.

## 17.

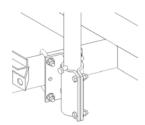
Mark the distance recorded in step 15 on the opposite side.

## 18. TOP VIEW



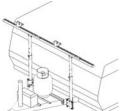
Place the assembled frame adaptor at the distance marked, making sure the frame adaptor is level. Tighten U-bolts.

## 19.



Place the assembled uprights into the frame adaptors as shown. Place the  $3/8 \times 2$ -1/2" bolt so the bolt shaft is sitting on top of the frame adaptors.

## 20.

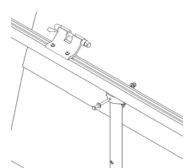


With both tubes in place, adjust the tube adaptors on the load bar assembly to fit over the upright tubes.

#### 21.

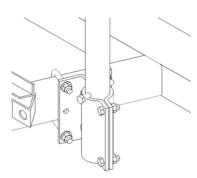
Orient the tubes so that the hole in the tube adaptor lines up with the hole on the upright.

## 22.



Place the 1/4 X 2-1/2" bolt with hardware through the tube adaptor and upright tube and torque to 5 ft-lbs (60 in-lbs). Caution: Do not over tighten bolts as they may shear.

## 23.



Tighten the outermost two bolts on each frame adaptor as shown until the tube is firmly held in place.

## 24.

Remove the  $3/8 \times 2-1/2$ " bolt from the lower tube and save in case rack is to be removed and reassembled.

#### 25

With one hand holding the load bar up, remove both safety lynch pins.

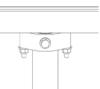
## 26.

Lower load bar until it is as far down as it can go.

## 27.

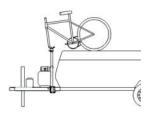
Using a tape measure, center the load bar on the uprights. Adjust as necessary by sliding the load bar.

## 28.



Secure the load bar by tightening the 1/4-20 lock nuts (4) on the tube adaptors. Torque to 5 ft-lbs (60 in-lbs). Caution: Do not over tighten bolts as they may shear.

29.



Adjust the height of the load bar so the skewers are lower than the top surface of the trailer. Remove the safety lynch pins, adjust load bar to desired height and re-pin and secure with loop. Leave clearance between bike sprocket and top of trailer.

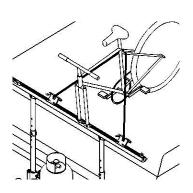
30.



Remove the front tire of the bicycle(s). Place the rear tire of the bicycle on top of the trailer and position front fork to the centermost fork skewer. Mount fork onto skewer as you would your wheel, using the manufacturers recommended installation instructions. Make sure the skewer firmly holds the fork! Repeat until all bicycles are secured to the skewers.

With all bicycles in their desired locations, apply the enclosed tire guard under each rear tire following the tire guard directions below.

32.



To prevent the bicycle from moving side to side and potential upward movement, secure the rear of the bicycle by using the provided nylon straps. Stabilize the rear of the bicycle by looping the strap around the seat post and back to the adjacent fork skewer. Do this on each side of each bicycle. Secure the outermost bicycles to the eye nut in step 9. Tie off excess strap material before traveling.

🔼 Caution! Be aware of your vehicles turning radius and the proximity of the load bar to the rear edges of your vehicle. Damage may occur if corners are taken too tightly.

Caution! When placing tire back on bicycle make certain all brakes are in place and adjusted correctly. Make sure the tire is securely fastened.

## TIRE GUARD INSTRUCTIONS

- 1. Apply when temp is above 70° F (22°C) and to surfaces that are smooth, dry, and free of oils and dust.
- 2. Mix a solution to a ratio of 25% isopropyl alcohol (rubbing alcohol) and 75% water. Do not use any soaps.
- 3. Carefully remove the protective liner on the Abrasive Resistant Film, taking care not to touch or contaminate the adhesive.
- 4. Flood the adhesive side of the film with the mixture of alcohol/water solution. This will help in handling and prevent the film from sticking to itself.
- 5. Spray the trailer surface with the alcohol/water solution, and position the film on the surface.
- 6. Use a squeegee to press the film in place and force out the excess solution.
- 7. To remove any entrapped air, puncture the film with a pin and press out the air with a squeegee or use finger pressure. Do not use razor blades or knives to puncture film as these can leave visible marks.
- 8. Wipe the application area with a clean cloth.

#### PRO RAC GUIDELINES

Please review the instructions and warranty carefully. Assembly and installation are the purchaser's responsibility and beyond ProRac's control. Therefore, ProRac exclusively limits its warranty to the repair or replacement of a defective ProRac product for up to three years from retail purchase. Warranty excludes damage to your vehicle, cargo, or any person or property during assembly, installation, and use.

- Do not carry more than 150 pounds (68KG) of combined cargo and accessories on ProRac load bars. ProRac cannot warranty loads that exceed this limit.
- Do not use ProRac load bars and accessories for purposes other than those for which they were designed. Do not exceed their carrying capacity. Failure to follow these guidelines or the product instructions will void the warranty.
- Make sure all knobs, bolts, screws, straps, and locks are firmly attached, tightened, and locked before every trip. All fasteners must be periodically inspected for signs of wear, corrosion, and fatigue. Check your load at stops during long trips to ensure continued fastening security.
- Check all local and state laws governing projection of objects beyond the width of vehicle. Be aware of the width and height of your cargo since low-clearance branches, bridges, and parking garages can affect the load. Never drive with any lock, knob, or rack in an open or unlocked position.
- Remove valuable gear if your vehicle is unattended.
- All cargo will affect the vehicle's driving behavior. For your safety, adapt your speed to the conditions of the road and load being carried. Obey all posted speed limits and traffic cautions.
- Due to their wind resistance, do not carry disks or wheels with covers on the ProRac bike carrier.
- Consult your ProRac dealer if you have questions regarding the operation and limits of ProRac products. Review all instructions and warranty information carefully.